



POLICY TITLE      LAND USE ON OR NEAR LANDFILLS AND DUMPS		NO. 07-07-01
<u>Legislative Authority</u>  the Environmental Protection Act, Part V Ontario Regulation 309 the Planning Act, Sections 2(e), 2(h)		
<u>Statement of Principles</u>  This policy provides guidelines for MOE staff reviewing proposals for land use on or near operating and non-operating landfills and dumps, as defined in Regulation 309, regardless of ownership. This policy is written to complement the Ministry's abatement programs.		
DEFINITIONS		
<u>Land Use</u>	Any existing or proposed activity, structure, service, facility, or natural feature, either at, above, or below grade, which conforms to an approved municipal plan.	
<u>Land Used for Waste Disposal Purposes</u>	The land comprising the fill area where landfilling or dumping has occurred, and the land identified in a certificate of approval which is being used for the leachate buffer area and/or the gas buffer area.	
		November 1987
<u>Point of Contact</u>	Approvals Branch	
<u>Effective Date</u>  November 18, 1987		

### Sensitive Land Use

A land use where man or the natural environment may experience an adverse environmental effect from an incompatible land use.

### Fill Area

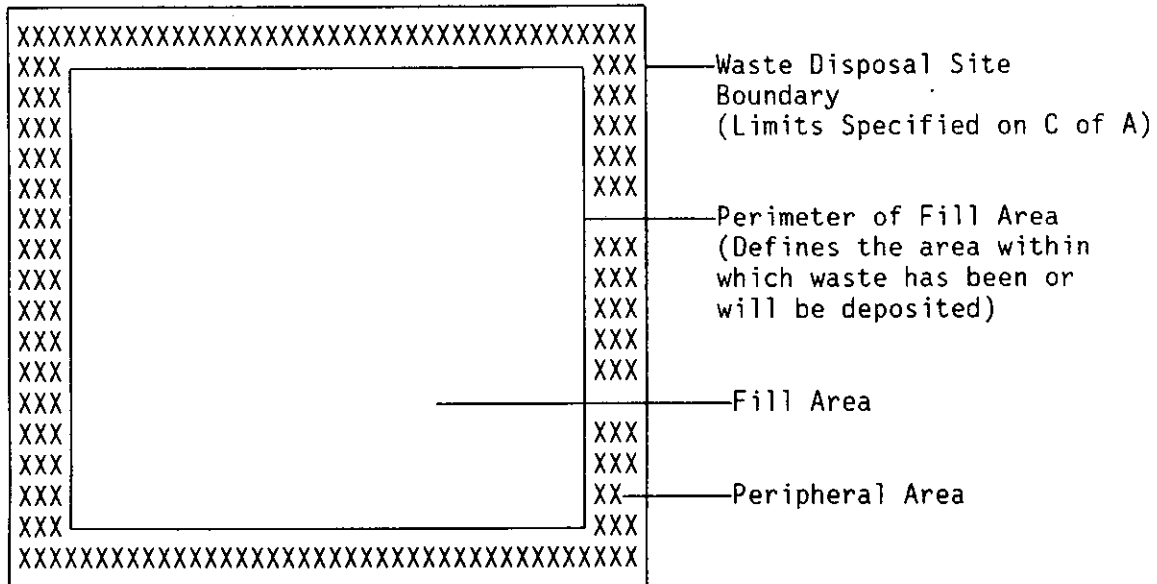
The area of a waste disposal site set aside for landfilling or dumping.

### Peripheral Area

The area controlled by the applicant between the boundary of the waste disposal site and the fill area. Together the peripheral area and the fill area make up the waste disposal site. The peripheral area will contain the buffer areas required to be on site.

CONCEPTUAL DIAGRAM NO. 1

(Plan View)



LANDFILL OR DUMP

1. Policy Objective

The objective of this policy is to protect the health, safety, convenience, and welfare of residents from potential adverse environmental effects of landfills and dumps, by restricting or controlling land use.

2. Application

This policy applies to all proposals for land use on or near operating and non-operating landfills and dumps, which contain or contained municipal domestic waste, industrial solid waste and/or sewage sludges. This policy does not apply to lands certified as organic soil conditioning sites under Regulation 309.

2.1 General

For landfills and dumps that have accepted liquid industrial, toxic, or hazardous waste, investigations will be required, and additional measures beyond those discussed in this policy may be necessary.

2.2 Liquid Industrial and Hazardous Waste2.3 MOE Involvement

This policy will be used by MOE staff when reviewing land use proposals, including official plans and amendments, subdivisions, condominiums, severances, and zoning by-laws:

- (a) at the request of the responsible Ministry or the delegated approving authority, under the Planning Act or the Condominium Act;
- (b) for land use requests subject to Section 45 of the Environmental Protection Act; and
- (c) for undertakings subject to the Environmental Assessment Act.

3. Overall Responsibility

In the context of this policy, it is the responsibility of the Ministries of Environment and Municipal Affairs to oversee and advise upon land use proposals, within their respective mandates, to ensure that the factors set out in Section 4 have been considered, and that involvements and commitments in Sections 5 and 6 are carried out when necessary.

3.1 Landfill or Dump

Staff will ensure that the operator and/or owner of an operating and non-operating site comply with MOE requirements for the control of adverse environmental effects of the landfill or dump.

3.2 Land Use

3.2.1  
Near Land Used or  
to be Used for  
Waste Disposal  
Purposes

Staff will expect the developer and the municipality to fulfill their responsibility to protect public health and safety in areas of land use near a landfill or dump, and to prevent major problems with nuisance effects which may extend beyond the landfill or dump.

3.2.2  
On Land Used for  
Waste Disposal  
Purposes

Where a land use proposal is submitted for approval under Section 45 of the Environmental Protection Act, staff must be assured by the developer and the municipality that the proposal contains adequate measures for the protection of public health and safety, to facilitate a recommendation to the Minister.

Where an approval under EPA Section 45 is not required from the Minister of the Environment, Section 3.2.1 of this policy applies.

4. MOE Environmental  
Considerations

4.1 Operating Sites

Factors to be considered when land use is proposed near an operating site include landfill generated gases, ground and surface water contamination by leachate, odour, litter, traffic, visual impact, dust, noise, other air emissions, fires, surface run-off, vectors and vermin. Particular attention shall be given to the production and migration of methane gas.

4.2 Non-Operating Sites

Factors to be considered when land use is proposed on or near a non-operating site include leachate, surface run-off, ground settlement, visual impact, soil contamination/hazardous waste and landfill generated gases. Particular attention should be given to the production and migration of methane gas.

4.3 Assessment

The adverse environmental effects of the factors in 4.1 and 4.2 may create:

- (a) a hazard or health/safety risk;
- (b) a nuisance to man; and/or
- (c) degradation of the natural environment.

The overall extent, number, degree, and frequency of adverse environmental effects can vary with each site. Consideration must be given to the nature of proposed land use(s).

Reference should be made to the Ministry's guideline entitled "Assessing Methane Hazards From Landfill Sites" if particular site conditions warrant obtaining further information.

5. Land Use Considerations

5.1 General

5.1.1 Sensitive Land Use

MOE will normally recommend against proposals for sensitive land use adjacent to operating landfills and dumps, and land used for waste disposal purposes where there are completed or partially completed fill areas.

Where land uses are proposed for approval under Section 45 of the Environmental Protection Act, the Ministry normally will not permit residential and other sensitive land use.

5.1.2  
Major  
Environmental  
Impacts

MOE will recommend against land use where no feasible remedial measures have been incorporated to prevent adverse environmental effects from having a significant impact on the proposed land use.

5.1.3  
Sequential  
Development

In considering long range planning, MOE may recommend that certain types of land use be phased to coincide with closure of sections of a landfill or dump, or the operation itself, as nuisance effects are reduced or eliminated. This approach will only apply where no risks to health or safety are present.

5.2 Land Use Within  
30 m of a Fill  
Area

5.2.1  
Operating Sites

No land use may take place within 30 metres of the perimeter of a fill area. This is a minimum distance.

5.2.2  
Non-Operating  
Sites

Where technical controls for leachate, or leachate and gas are required surrounding a fill area, no land use may take place within 30 metres of its perimeter. This distance may be reduced to 20 metres where only gas controls are necessary.

5.3 Land Use Within  
500 m of a Fill  
Area

MOE considers the most significant adverse environmental effects to be normally within 500 metres of the perimeter of a fill area. Staff will ensure that the developer has evaluated the presence and impact of any adverse environmental effects or risks to health and safety and that necessary remedial measures are taken when land use proposals are within this distance. This assessment should be based on the nature and knowledge of the disposal site, and the nature of land use(s) proposed. The actual influence areas (migration ranges) for the considerations listed in Sections 4.1 and 4.2 of this policy will vary with the individual landfill or dump.

5.4 Land Use Beyond  
500 m of a Fill  
Area

In exceptional hydrogeologic situations such as areas of fractured rock or sand, MOE staff will recommend that hydrogeologic and/or engineering studies be carried out for land use proposals beyond 500 metres of a fill area, where it is anticipated that leachate or gas could migrate beyond 500 metres and pose a problem.

5.5 Hydrogeologic/  
Engineering  
Studies

5.5.1 Responsibility

Where the hydrogeologic and geologic setting of the developer's property and the inter-relationship with gas and/or leachate from the fill area are unknown, staff will ensure that the developer engages a qualified hydrogeologist and/or engineer to determine the subsurface conditions and, where necessary, propose remedial measures.

5.5.2 Exceptions

A formal site investigation normally will not be required where MOE is satisfied that the evaluation of existing data indicates the absence of a problem.

6. Controls and Monitoring  
for Adverse  
Environmental Effects

6.1 Implementation  
Responsibility

6.1.1 Developer

Staff will ensure that, where necessary, control measures are proposed by the developer and/or his consultant. These measures include design details and specifications of any device or facility.

6.1.2  
Municipality

Staff will confirm with the local municipal authority that the local municipal authority is responsible for ensuring that proper control measures are implemented and monitored, and that periodic inspections of both operating and non-operating landfills and dumps for contaminant migration and potential hazards are undertaken.

6.1.3  
MOE

Where appropriate, MOE staff will recommend, as a condition of development approval, that controls be included to deal with adverse environmental effects or risks to health or safety and that monitoring of contaminant migrations and inspections of control facilities be carried out.

6.2 Monitoring on  
Private Property

Where monitoring and inspections will be required on private property, staff will recommend that a contract be executed between the developer and the municipality, in the form of, or part of, an agreement that may be registered on title and run with the land.

6.3 Buffering  
Techniques

One or a combination of buffers as defined in MOE Policy 07-03 "Land Use Compatibility" may be employed in a given situation.